

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1. (Currently amended) A method, comprising:

cutting and severing a semiconductor wafer, having a front side and a back side, into a plurality of portions, the cutting and severing being performed in a manner that allows the portions to remain proximally disposed with each other as if the semiconductor wafer had not been cut within an area having a shape and size substantially that of the semiconductor wafer prior to the cutting and severing;

applying a tape to a front side of to tape the portions together to form as if uncut a taped-together semiconductor wafer; and

grinding a backside-back side of the taped as if uncut taped-together semiconductor wafer.

2. (Currently amended) The method of claim 1 wherein said cutting and severing of the semiconductor wafer includes:

laser scribing the semiconductor wafer; and

dicing the semiconductor wafer into a plurality of dice, the dicing being performed in a manner that allows the dice to remain proximally disposed with each other as if the semiconductor wafer had not been diced within an area having a shape and size substantially that of the semiconductor wafer prior to the cutting and severing.

3. (Previously presented) The method of claim 2 wherein said laser scribing of the semiconductor wafer includes forming at least one trench along streets of the semiconductor wafer separating adjacent semiconductor devices of the semiconductor wafer.

4. (Currently amended) The method of claim 1, further comprising:
mounting the ~~taped as if uncut~~ taped-together semiconductor wafer having its ~~backside~~ back side grinded; and
removing the tape from the front side of the ~~taped as if uncut~~ taped-together semiconductor wafer.

5. (Currently amended) The method of claim 1, further comprising:
attaching an adhesive to the ~~backside~~ back side of the semiconductor wafer prior to cutting and severing the semiconductor wafer; and wherein said cutting and severing of the semiconductor wafer includes:
scribing lines along streets on the front side of the semiconductor wafer; and
cutting and severing the semiconductor wafer along the streets of the semiconductor wafer with the scribed lines.

6. (Currently amended) The method of claim 5, further comprising:
cutting the tape and the adhesive attached to the ~~backside~~ back side of the ~~as if uncut~~ taped-together semiconductor wafer to substantially define a perimeter of the ~~as if uncut~~ taped-together semiconductor wafer; and
removing the adhesive from the ~~backside~~ back side of the ~~as if uncut~~ taped-together semiconductor wafer.

7. (Currently amended) The method of claim 5, further comprising:
mounting the ~~as if uncut~~ taped-together semiconductor wafer having its ~~backside~~ back side grinded; and
detaping the tape from the front side of the ~~as if uncut~~ taped-together semiconductor wafer.

8. (Currently amended) A method of thinning a semiconductor wafer, the method comprising:
attaching an adhesive to a ~~backside~~ back side of the semiconductor wafer;

scribing lines along streets separating integrated circuit devices along a front side of the semiconductor wafer;

cutting the semiconductor wafer along the streets of the semiconductor wafer with the scribed lines to cut and sever the semiconductor wafer into a plurality of portions, with the portions remaining proximally disposed to each other and held in place by the adhesive ~~as if the semiconductor device had not been cut within an area having a shape and size substantially that of the semiconductor wafer prior to the cutting and severing;~~

applying a protective layer onto at least a portion of the front side of the ~~as-if uncut adhesively held-together~~ semiconductor wafer;

cutting the protective layer and the adhesive attached to the backside of the ~~as-if uncut adhesively held-together~~ semiconductor wafer to define a perimeter of the ~~as-if uncut adhesively held-together~~ semiconductor wafer; and

grinding the backside of the ~~as-if uncut adhesively held-together~~ semiconductor wafer to reduce a thickness of the ~~as-if uncut adhesively held-together~~ semiconductor wafer.

9. (Original) The method of claim 8 wherein the semiconductor wafer includes an interlayer dielectric (ILD) layer having a low dielectric constant (K).

10. (Previously presented) The method of claim 9 wherein said scribing of lines along the streets includes laser scribing through the ILD layer having a low dielectric constant (K).

11. (Previously presented) The method of claim 8 wherein said scribing of lines along the streets includes scribing two lines substantially along either side of each street.

12. (Previously presented) The method of claim 8 wherein said applying of the protective layer includes applying a protective coating.

13. (Original) The method of claim 8, further comprising removing the protective layer.

14. (Original) The method of claim 8 further comprising, removing the adhesive cut to define the perimeter of the semiconductor wafer.

15. (Original) The method of claim 8, wherein the protective layer includes a backgrind tape.

16. (Currently amended) The method of claim 8, further comprising:
mounting the ~~as if uncut adhesively held-together~~ semiconductor wafer having its ~~backside~~ back side grinded; and
removing the protective layer from the front side of the ~~as if uncut adhesively-held together~~ semiconductor wafer.

17. (Currently amended) A method, comprising:
dicing a semiconductor wafer ~~having a first and a second opposite side~~ into a plurality of dice, the dicing being performed in a manner that allows the dice to remain proximally disposed to each other ~~as if the semiconductor wafer had not been diced within an area having a shape and size substantially that of the semiconductor wafer prior to the dicing;~~
taping ~~together, from the first side, of the as if undiced dice, to form a taped-~~ together semiconductor wafer ; and
grinding ~~from the second side of the as if undiced taped-together~~ semiconductor wafer.

18. (Previously presented) The method of claim 17 wherein the semiconductor device includes a low-K interlayer dielectric (ILD) layer, and said dicing of the semiconductor wafer includes:
laser scribing through the low-K ILD layer to form trenches in the low-K ILD layer; and

sawing the semiconductor wafer along the formed trenches to singulate semiconductor devices of the semiconductor wafer.

19. (Previously presented) The method of claim 18, wherein said laser scribing through the low-K ILD layer includes scribing two lines along streets separating adjacent ones of the semiconductor devices.

20. (Previously presented) The method of claim 17, further comprising mounting the semiconductor wafer before dicing the semiconductor wafer.

21. (Currently amended) The method of claim 20 further comprising:
cutting a tape applied from~~to~~ the first side of the ~~as if undiced~~ to form the taped-together semiconductor wafer ; and
removing an adhesive used to mount the ~~as if undiced~~taped-together semiconductor wafer.

22. (Currently amended) The method of claim 21, further comprising, cutting the adhesive used to mount the ~~as if undiced~~taped-together semiconductor wafer to approximate a shape of the ~~as if undiced~~taped-together semiconductor wafer before removing the adhesive.

23. (Original) The method of claim 21 wherein the adhesive is a mounting tape.

24. (Currently amended) The method of claim 17, further comprising mounting the ~~as if undiced~~taped-together semiconductor wafer having its second side grinded onto a wafer frame.

25. (Currently amended) The method of claim 24, further comprising removing a tape applied from~~to~~ the first side of the ~~as if undiced~~to form the taped-together semiconductor wafer.

26. (Cancelled)

27. (Cancelled)